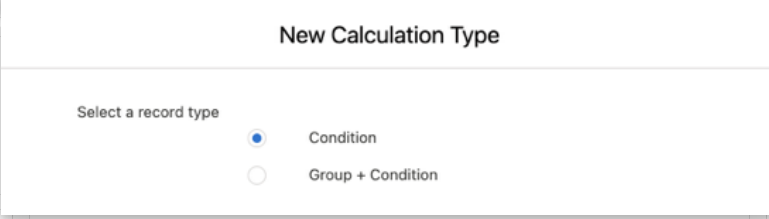A Calculation Type is an option that provides different ways of discount calculation. This calculation can be carried out based on a single Condition or a Group of conditions. This article describes the overall structure of the Calculation Type setting and its elements used for the setup process.

Record Types

CT Orders package introduces two record types for the **Calculation Type** object that can be used for different scenarios; in some cases, both record types might be applied. These are the main differences you need to consider when creating a new Calculation Type:

- **Condition**: discount calculation conditions that allow using advanced calculation methods.
  - Supports difficult cases for **Promotions**, for example:
    - Allows setting the number of unique SKUs to be eligible for the discounting.
    - Allows setting the required min for a particular product from the group to get the discount.
  - Uses JSON syntax.
  - Created automatically if related to a promo.
  - Can be set up by a developer or an advanced consultant.
- **Group + Condition**: **Condition** records that store specific calculation conditions and are linked to the parent **Condition Group** object.
  - Inherits the structure of ERP systems and is easier for integration.
  - Uses Salesforce syntax and can be set up by consultants.

Calculation Type Overview

Order Module | Accounts ∨ | CT Orders ∨ | Sales Organizations ∨ | Freebie Types ∨ | Catalogs ∨ | Promotions ∨ | Calculation Types ∨ | CT Price Books ∨ | More ▾

Calculation Type
Personal

Edit | Delete | Clone | ▾

Procedure Calculation Types (10+)
10+ items • Updated 9 minutes ago

		Procedure Calcula... ∨	Procedure Name ∨	Sales Organization ∨	Order Type ∨	Procedure... ∨	
1		PCT-000000000	default_vat	Default Sales Org	Order	User User	▾
2		PCT-000000006	default_noVat	Default Sales Org	Order	User User	▾
3		PCT-000000011	default_vat_rounded	Default Sales Org	Order	User User	▾

View All

Condition Groups (7)
7 items • Updated 10 minutes ago

		Condition Group # ∨	External Id ∨	Order ∨	Active ∨	Start Date ∨	End Date
1		CG-000000000	50001001	10	✔		
2		CG-000000001	50001002	20			17.12.2020
3		CG-000000002	50001003	30	✔	19.12.2020	18.09.2021
4		CG-000000003	50001004	40	✔	19.09.2021	
5		CG-000000004	50001005	50	✔		17.12.2020
6		CG-000000005	50001006	60	✔	19.12.2020	18.09.2021
7		CG-000000006	50001007	70	✔	19.09.2021	

View All

Conditions (10+)
10+ items • Updated 9 minutes ago

		Condition # ∨	Condition Group ∨	External Id ∨	Order ∨	Active
1		C-000000000	CG-000000000	50001001001	10	✔
2		C-000000019	CG-000000001	50001002001	10	✔
3		C-000000028	CG-000000002	50001003001	10	✔

View All

Calculation Type Name: Personal
Record Type: Group + Condition
External Id: Personal
Promo Related: ☐

∨ Calculation Type Properties
Calculation Method: Decrease Price
Unit Of Measure: Percent

∨ Update Settings
Condition Fields Update Type: Real-Time
Force Condition Fields Update: ☐

∨ Quantity Settings
Level Based On ⓘ: Order Line Items
Level Formula ⓘ

∨ Field List
Condition Fields List
orders__OrderId__r.orders__AccountId__r.Parent.CTCP G__ExternalId__c,orders__ProductId__r.CTCPG__Parent Id__r.CTCPG__ParentId__r.CTCPG__ExternalId__c,order s__OrderId__r.orders__AccountId__r.Parent.Parent.CTC PG__ExternalId__c,orders__ProductId__r.CTCPG__Pare ntId__r.CTCPG__ParentId__r.CTCPG__ParentId__r.CTCP G__ExternalId__c,RecordType.DeveloperName,orders__ ProductId__r.CTCPG__ExternalId__c
Discount Recalculation Fields
Condition Recalculation Fields ⓘ

∨ System Information
Created By | Last Modified By

The **Calculation Type** detail page consists of four sections:

1. Calculation Type settings.

2. **Procedure Calculation Types** linking the Calculation Type to Pricing Procedures.

> This relationship is managed by the system automatically.

3. List of related **Condition Groups** which store the set of conditions.

> Only if the Calculation Type is of the **Group + Condition** record type.

4. List of related **Conditions** which store details for discount calculation.

Calculation Type Settings

1. General Settings:
   - **Name** and **Record Type**.
     If you want to change the **Condition + Group** record type to **Condition**, you need to delete all related **Condition Group** records beforehand.
   - **External Id**, which will be used in Pricing Procedure to specify the Calculation Type.
   - **Promo Related** checkbox to signify that the Calculation Type is used to calculated discounts for promo products.

   > Only **Condition** record type can be used for promo discounts calculation.

2. The **Calculation Type Properties** section:
   - **Calculation method** that allows to increase or decrease the product price during discount calculation.
   - **Unit Of Measure** that allows selecting the units in which you want to give a discount: amount or percent.

3. The **Update Settings** section for the optimization of API calls during the integration.
   - **Condition Fields Update Type** to choose if the update of the fields will be performed in real-time or in batches.
   - Checkbox to imply the **Force Condition Fields Update**.

4. The **Quantity Settings** section:
   - the **Level Based On** option allows to define the location of source quantity field to apply conditions and calculate discounts: on **Delivery Line Items** or on **Order Line Items**.
   - The **Level Formula** allows quantity calculations based on several fields of a *Number* data type either from the **Order Line Item** or **Delivery Line Item** objects. The resulting quantity is used for the discount recalculation on the selected **Level Based On** object record. If the field is empty the discount is calculated based on the quantity field specified in the mapping settings for **Order Line Item** and **Delivery Line Item**.

     > For the Level Formula, you can also use the fields of a *Number* and *Currency* types that are used for the quantity (**Quantity**) and the cost (**Amount**) calculations. The values from these fields can be used for the discount calculation based on the entire order or the previous deliveries. In this case, an additional Step should be specified in the Pricing Procedure to process this summary.

5. The **Field List** section:
   - **Condition Fields List** is used for specifying the path to fields on the Order Line Item that will be checked for matching conditions.
   - If specified, **Discount Recalculation Fields** will initialize a partial discount recalculation within the applied Condition.
   - If specified, **Condition Recalculation Fields** will initialize a complete discount recalculation by re-matching and applying all Conditions anew.

     > Note that both fields can retrieve the information only from certain objects and field types. See the limitations in this article.

> See more on the JSON syntax used in the **Level Formula** and **Recalculation Fields** and the examples in this article.

Applied Logic based on the selected Record Type

Depending on the chosen record type the processing logic may vary:

- For the **Group + Condition** calculation type: the **Condition Field List** aggregates all paths to the **Condition Field** fields on **Condition Group** records. This occurs automatically when creating the conditions but may require manual editing of the **Condition Field List** if any changes or the removal of the conditions was made. Therefore, the **Condition Details** field on the **Condition Group** record contains the path to the fields, while the **Condition** record included in this group contains the value used for checking for matching conditions for **Order Line Item** fields.
- For the **Condition** calculation type: the **Condition Field List** aggregates all paths to the **Condition Detail** field on **Condition** records.
  In this case, the in **Condition Details** field will be defined both the path to the fields and the value used for checking for matching conditions in JSON format.

  > The **Condition Field List** filed update is performed automatically in one of two possible ways depending on the option selected in the **Condition Fields Update Type** picklist.

Condition Group Overview

The **Condition Group** page consists of two sections:

1. The Condition Group settings.
2. List of related **Conditions** which store details for discount calculation.

The **Condition Group settings** page includes:

1. General settings:
   - External Id, which will be used in **Pricing Procedure** to specify the **Calculation Type**.

- Group's application **Order** number.

2. Condition Group Dates:
   - A range of dates for the application of the conditions within the **Condition Group**.

3. Conditions:
   - A specified lookup path to the field on the **Order Line Item** which will be checked for matching conditions.

> The specified fields must have a constant value (as Brand, Parent Account, etc), i.e. cannot be altered during order creation or editing. For example, no price-related fields can be specified, as they will be dynamically changed in the process. Dynamically changing fields can only be specified in the Advanced Criteria field on a **Condition**.

Condition Overview

The Condition page includes three sections:

1. Set of **Condition Levels**.
2. Set of **Calculated Discounts**.
3. **Condition Settings**
   a. General settings:
      - The names of related **Calculation Type** and **Condition Group**.
      - External Id, which will be used in **Pricing Procedure** to specify the **Calculation Type**.
      - A Promotion for which the **Condition** can be applied, if the **Calculation type** is related to a Promo.
   b. Condition Dates:
      - A range of dates when the **Condition** is active.
   c. Conditions:
      - Specified values of Condition details.
   d. Exception Condition:
      - Specifies an Exception condition logic to exclude the discount application.
   e. Discount Settings:
      - Calculation Method: Basic or Advanced.

        > The Advanced calculation method requires Advanced Criteria to be specified with JSON.

      - Discount Rate Location for this condition: defines the source of the **Discount rate (%)** field either on **Condition** or **Condition Level** record.
        If the **Level record** is selected as a rate location, the discount value should be specified on the **Condition Level** record.
      - Discount Rate (%): The rate of the discount in %.
      - Discount Rate (Amt): The rate of the discount in number (amount).
      - Discount Rate Source Field (%):

The API name of the field of <u>Percent type</u> to be used as the source for the discount rate (%).

- Discount Rate Source Field (Amt):
  The API name of the field of <u>Number type</u> to be used as the source for the discount rate (Amt).

f. Advanced Criteria:

- This field determines the group discount for a product and is considered only if the **Advanced calculation** method was selected.

∨ Condition Dates

Start Date

End Date

Active
☑

∨ Conditions

Condition Details
{"conditions":{"operator":"AND","items": [{"field":"orders__PromotionId__c","operator":"equal","value":""}]}}

∨ Exception Condition

Exception Condition
{"exceptionCondition": {"operator": "AND","productCount": {"filter": {"operator": "AND","items": [{"field": "RecordType.DeveloperName","operator": "equal","value": "Freebie"}]},"minCount": 3},"requiredProducts": {"productIdField": "orders__ProductId__r.CTCPG__ExternalId__c","operator": "AND","items": []}}}

∨ Discount Settings

Calculation Method
Basic

Discount Rate Location
Condition Record

Discount Rate (%)
4,80 %

Discount Rate (Amt)

Discount Rate Source Field (%)

Discount Rate Source Field (Amt)

∨ Advanced Criteria

Advanced Criteria

> System Information